

USE THIS IN THE BOOK

AS AN

INDEX SHEET

To divide off the work
in different studies

— OR —

AS A

FILING COVER

To bind, with the fasteners,
all work worth keeping for review.

For use in the

National Notebook

Patented by E. W. Hill, July 5, 1898.

SUBJECT OF STUDY:

To index the book, write below on the margin, the name of the study



Sta 10213

depth. 89 fath

Surface, Sigbee - A, 159 water sample
16.85 | @ 17.

20 m Sigbee 9.10 @ 11.°

40 m. Big #3 6.63 @ 14.°
" #3 5.55 @ 11.5° (second reading)
water sample.

100 m Big #2, 4.12 @ 12.°
water sample

Bot. Big #2, 4.56 @ 11.5°
130 m. water sample.

Time 5 A.M.

nets

Bottles & thermometers.

Bigelow #1 = ^{S+V}#298 - 3 to 20°

" #2 Richter #154 - 2 to 26

" #3 = S+V #409 - 5 to 20

Sq. frame = Taylor #1 - 2 to 31.

Sigsbee messenger = Richter 159 - 2 to 27

Ekman S+V. 543 - 14°-30°
" S+V. 406 - 12°-15°

Put on Big # 1

Set out 55 = 55

Put on Big # 2

Set out 60 = 115

Put on Big # 3

Set out 20 135

Put on sq. frame

Set out 20 = 155

10
20
50
75
90

* 183
18

102

Sta 10214.

July 19th

110 fath = 201 meters.

190	Put on Big #1	let out 40 = 40
150	" " Big #2	let out 50 = 90
100	" " Big #3	" " 60 = 150
40	" " Eck.	" " 20 = 190
20	" " X	" " 20 = 190

Color = 5.

Therm.	190 m.	§ (Big #2) 5.64 @ 10.8°	water sample
"	150 m.	5.27 @ 12.5°	water sample
"	100 m.	4.43 @ 12.5°	water sample
"	* 40 m.	(? 3.88) @ 17°	water sample
"	20 m.	15.68 @ 17°	<u> </u>
"	surface	17.5 @ 18°	water sample

* Ther. #1, at 40 m. reads 7.3 @ 12.5°

§ Big #1 out of order, replaced by Big #2, 190 m.

$$\begin{array}{r}
 75 \\
 \hline
 7 \overline{) 109} \\
 \underline{80} \\
 29 \\
 \underline{28} \\
 1
 \end{array}$$

10215 July 20, 1914

~~69 fath. = 120 meters~~

~~44 fath. = 80 m.~~

70 m. put on Big #2 let out 30 = 30

40 m. " " #3 " " 20 = 50

20 m. put on therm #1 " " 20 = 70

=====

Therm. 70 m. 9.73 @ 14.5° water

" 40 m. 10.50 @ 14° water

" 20 m. 12.25 @ 14.5° ———

" surface 16.7 @ 17.5° water
—————

Hel 70 out

Strain 50 out

1 ft. 40 out

Coln 7.

$$\begin{array}{r} 73 \\ 62 \\ \hline 78 \end{array}$$

10216 July 20 6. PM.

43 fath = 78 meters

Lat $40^{\circ} 30'$ - Long $68^{\circ} 20'$

70 m. Big #2 Let out 30 m

40 m. Big #3 " " 20 m

20 m. Therm. #1 " " 20 m.

Therm. 70 m. 10.72 @ 14° water sample

" * 40 m. 14.10 @ 14° " "

" 20 m. 13.85 @ 15° —

" surface 18.6 @ 18.5° water sample

*
second reading) 12.99 @ 14°

40 m, therm #1 }

Inant 70-0 m.

Hel. 60-0 -

meter stream 40-0

1 ft 35-0

10217 July 21 2.30 Am.
3 to 4.30 Am

82 fath. = 150 meters.
Lat $40^{\circ} 20'$ Long. $68^{\circ} 23'$

~~Put a Big #2 let out.~~

150 fath on Big #3	"	50 = 50
100 " " #2	"	60 = 110
40 " " #1	"	70 = 130
20 " " #1 - Home	"	20 = 150

Surface.

~~Lat $40^{\circ} 35'$ Long.~~

Surface (Average)	17.30 @ 17	Surf
20 m. #1	10.75 @ 15	no
40 Big #1	9 @ 14	Surf
100 Big #2	11.85 @ 14	Surf
150 Big #3	(3 - failed)	Surf
40 #1	9.25 @ 12	
150 Big #2	10.68 @ 13	
Put a Big #2	Let out 110	= 110
Put a #1	Let out 40	= 150

10248 July 21 1914

Work to 500 m.

Surface	22.45 @ 20.5° W.S.
40 m Big #2	17.75 @ 20.° W.S.
100 Big #1	14.92 @ 19.5° W.S.
200 { Ekman.	—— W.S.
200 { Therm. #1.	11.0 @ 18.5° ——
300 Big #1	9.6 @ 20° W.S.
400 Big #3	—— W.S.
500 Big #2	5.6 @ 19.5° W.S.

Luant. net 500-0m.

Net net 500-0

Under stream 400-0

" silk 100-0

Lat. 40° 6'

Long. 68° 5'

10218.

1st shot.

Part on Big #2	let out	100 = 100
1 st " " " 3	" "	100 = 200
2 nd " " " 1	" "	100 = 300
3 rd " " " " "	" "	200 = 500

2nd shot.

200 Part on Thin #1	let out	100 = 100
100 " " Big #1	" "	60 = 160
40 " " Big #2	" "	40 = 200

$$\begin{array}{r} 91 \\ 7 \\ \hline 42 \end{array}$$

10219 July 21

54 fath. @ 98 m.

Surf	17.15 @ 19"	W.S.
20	17.25 @ 18"	—
40	16.05 @ 18"	W.S.
90	3.00	W.S.
90 m.	Therm., 17.35 @ 16"	

Port on	Big #1	Let out	50 = 60
" "	" 2	" "	20 = 70
" "	Hummer #1	" "	20 = 90

Drum 90 = 0 m.

Net " "

Port. drum 70 = 0

10220 July 22 8 Am,
 Thermometers changed, see list
 200 fath no bottom.

Surface	P 17.7°	10.3.
40 m	C 17.4 @ 17°	12.5
100 "	11.3 @ 16°	10.3.
200 "	8.2 @ 15°	10.8.
300 "	7.1 @ 14.5°	10.5.
400 "	5.8 @ 14°	10.5.
500 "	5.2 @ 10°	10.5.

1st shot

500	Pul on	Reg ³ 3	1st net	100 = 100
400	"	"	2	" " 100 = 200
300	"	"	1	" " 300 = 500

2nd shot

500	"	Reg ³ 3	" "	100 = 100
100	"	Reg ³ 2	" "	60 = 160
40	"	Reg ³ 1	" "	40 = 200

See over.

10220 - contd.

Meter sill 80-0 m.

" Stramin 400-0 m.

Helgoland 300-0 m.

10221 July 22
100 fath. - 185 ~~ft~~ meter

175 Big #2 let out 75. 75
100 Big #2 " 60 = 135
40 Big #1 " " 40 = 175

Core #4.

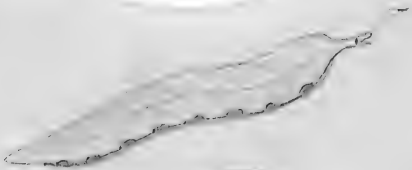
Surface. F61.7 W.S.

40 m. C 16.2 @ 17° W.S.

100 m. 12.09 @ 16.5° W.S.

175 m. 10.88 @ 16.°

150 m. Big #1. ——— W.S.



10322

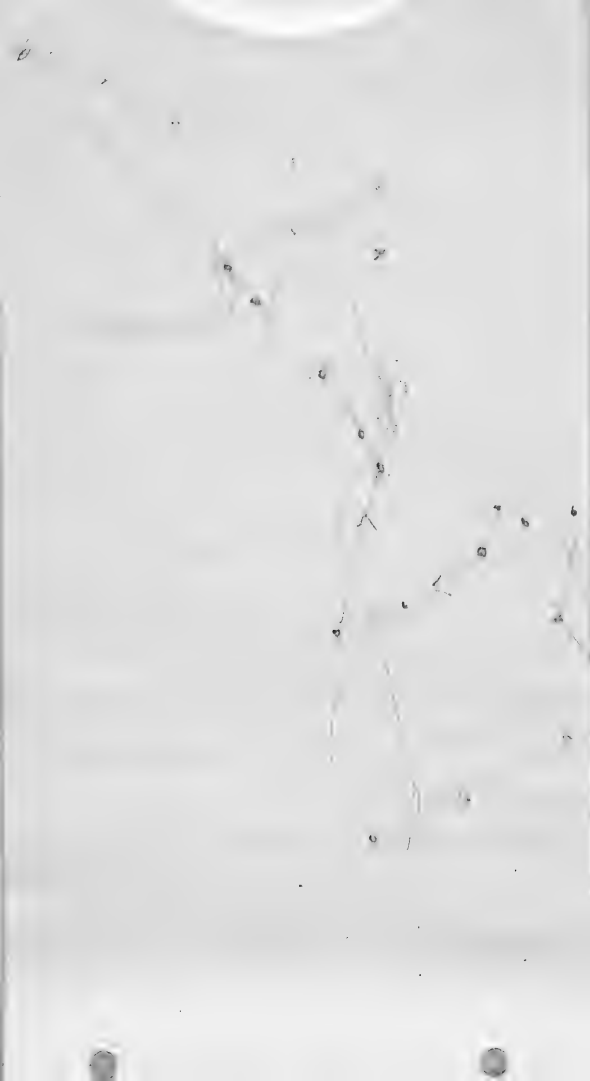
July 22 8 PM

Depth — $57 \frac{1}{2}$ fath. = 93 meters

Surface Temp 58.4 F. Sample

Bottom 90 m. 9.03 @ 12°

Put on Big. #2. let out.



15
2
— 8 2

10223 July 23rd 4A m.

45 fath = 82 m.

75 Put a Big #3 let out 35 ~ 35
40 " " Big #2 " " 20 ~ 55
20 " " Big #1 " " 20 ~ 70

Depth	56 F.	Sample
20 m	10.4 @	12.5 "
40 m	2.96 @	12 "
70 m	7.97 @	12 "

20 net } Sample
1 ft net }

Net out 75.0 m.

Quint net 75.0 m.

21/

10224 July 22nd 1914

30 fath - 63 meters.

Temp	F 52.0	W.S.
30	10.80 @ 11.5°	W.S.
55	10.85 @ 11.5°	W.S.

Lat	Reg ^{II} 2	Lat out 35.35
"	B ^{II} 3	" " 30.55

Current net 55.0 m

Net net 55.0 m.

20 net surface

Scallop dredge - bottom

Deep bottom sand & rocks

Cl 10220 July 23

P.M.

150 fath = 273 meters.

1st Shot

260 Put a Rig # 3 let out 60 = 60

" " " # 2 " " 50 = 110

" " " # 1 " " 150 = 260

2nd Shot

100 Put a Rig # 2 60 = 60

40 " " " # 1 40 = 100

0 F 59.5. W.S.

40 14.05 @ 13" W.S.

100 1.43 @ 12" W.S.

150 77.0 @ 11.5" W.S.

200 2.5 @ 11" W.S.

260 8.0 @ 10.5" W.S.

Hel met 260 - 0 m
 Lowest met 260 - 0 m
 Helter with 75 - 0 m.
 20 met surface

Calc 5.

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10226 July 24

Run R 119 - Ebbw.

50 fath. 91 m.

8.5 Pul on. Big[#] 3. 6.1 out 40 = 45

40 " " Big[#] 2 " " 40 = 85

Calc.

Surface 59.5° F. W.S.

40 m. 12.65 @ 14.5° W.S.

85 m. 6.70 @ 11.5° W.S.

40 m. (2nd alt. Big[#] 2) 12.72 @ 11.5

Notes.

Quant = 85 - 0

Hal = 80 - 0

20 0

... (lost) fish of Sta. 100, 120 fath.

10227 July 24, 1914

130 fath. = 228 meters

1st shot.

22 Put on Big # 3 let out 50 = 50

170 " " Big # 2 " " 40 = 90

130 " " Pickman " " 130 = 220

2nd shot.

80 Put on Big # 2 let out 40 = 40

40 " " " # 3 " " 40 = 80

=====

Surface 59.2 F. W. S.

40 m. 7.35 @ 13.5° W. S.

80 m. 7.00 @ 13° W. S.

130 m. (Big # 3) 6.55 @ 14.5° W. S.

130 m. 9.33 @ 13° W. S.

170 m. 7.3 @ 13.5° W. S.

220 m. 7.02 @ 13° W. S.

Collected.



10228 July 24

52 fath = 94 m.

21 Put on Big # 3 let out 45-45
40 " " # 2 " " 40-40

2nd shot: second instrument

Surface	58.5° F	W.S.
45m.	7.35, 11.5°	W.S.
75m.	8.50, 11.5°	W.S.

2nd shot

40m.	8.2, 12°
75m.	6.55, 11°

Net, net 50-50 m

20

surface

surface

surface

$$6 \frac{108}{109}$$

10229 - July 25 -

2 A.M.

63 fath = 114 m.

100 - put on Big 3. Let out 60 m.
put on Big 2. Let out 80 = 100

Surface, T = 56.2. (10.5)

#10 : 6.25 @ 9.5

100 : 6.30 @ 10.

Notes.

#20 & 4 ft line on surface.

~~Had~~ no ss out

Q. 100 - 0

10230 July 25.

30 fath = 54 m. ^{1 m}

50 m Put on Big #3 let out 20

30 " " " 2 " " 30-50

Surface 50.5° F W. S.

~~30 m 2.5 @ 6.5 W.~~

50 m 3.10 @ 1.5°

100 fath. 3.37 @ 6. Sept

50 " Big 2. 3.15 @ 6.7

Grant 50-0

Color 6.



Sta 10231 July 28th

32 fath. \approx 57 meters,

Current meter 96

Atlantic time,

30 fath. ~~2.0.00 - 2.15.28~~

P.M. 2.12.25 ~~2.22.25~~

10 min. Rev. 390, W by S.

3 fath. P.M. 2.30.00

5 min. Rev. 345, W, N, W.

3 P.M. Surf. temp. W.S.

Richter 159. 6.67 @ 9

30 m R. 154. = 1.86 @ 4.5' W.S.
R 159

50 m. $\frac{1}{1} = 1.92$ @ 6' W.S.

50 m. $\frac{1}{1} = 2.02$ @ 5'

Repeated -

P.M. 5 min.
30 fath. 3.9.0 3.14.00
R. 270 - W 5 W.

3 fath. 3.20. P.M. 5 min.
R. 390 - N.W.

30 fath. 4.3.0 4.8.0 5 min.
~~4.3.0 P.M.~~ 4.8.0
170 rev. N.S.W.

~~3 fath. 4.14 P.M.~~
3 fath. 4.21.30 4.26.30 5 min.
190 rev. N.W.

30 fath. P.M. 5.00 5.6.30 6 1/2 min.
110 Rev. - W.S.W.

3 fath. ~~5.12.30~~ 5.20.00 5.25. 5 min.
Rev. 340 N.

~~30 Jan 6.15 PM 6.11 5 min~~

~~6.15 PM~~

3 fath 6.29 P.m. ~~5 min~~
465 Rev N.

30 Jan 7 P.m. 7.10 P.m.
10 min.

240 Rev.

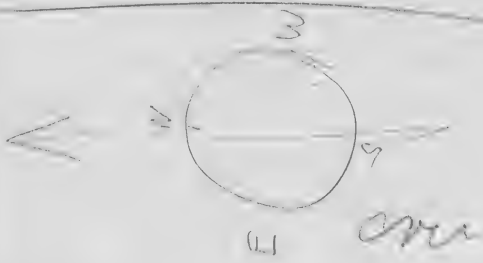
Direction?

Cod line under
to S.W.

Follow all points!
S1 NW & S.E.
long long N.E.S.
small hole S.

3 1/2 fath 7.17 P.m. 5 min.

460 Rev. ~~NE~~ NE



30 fath. 7:54 P.m. 5 min.

165. Rev. NE.

4 fath. 8:06 P.m. 5 min.

690 Rev. ENE

all balls in pocket

~~30 fath. 8:55 P.m. 5 min.~~
~~7:06~~
~~Rev.~~

4 fath. - 7-20 - 5 min.

885 - Rev. E by N.

usual leads NE.

Strong in compass.

4 fath

10.05 PM. 5 min.

780 - E.

4 fath 11 PM 5 min.

760 rev. E by S.

4 fath

~~12 midnight~~ ^{last big} ~~usage~~

5 min

12.10 AM

480 rev. N to ENE.

vessel sailing around.

4 fath 1 AM. 5 min.

90 rev. SW by S.

4 fath 2 Am. 5 min.

442nd row W.S.W

Ferris

10232 July. 28th

80 fath. = 146 m.

140 fath. R 154 lat out 40 = 40

100 " " # 1 " " 100 = 140

and shot

140 # R 154 lat out 40

100 # 1 " " 60 = 140

40 # R 154 " " 110 = 100

0.

1st. try

0 = 38.5' W.S.

40 = ②

100 = 2.75 ② 9.9

40 = 5.64 ③ 10.62

Color = y

2nd shift.

T.

40 = 4.56 @ 10.°

100 = 3.5 @ 9.°

140 = 5.22 @ 8.°

Notes

20 = 3

100 = 140 out: 120

1000 pills = 60 out: 500

10233 July 28

initial 100, 100, 100, 100, 100, 100, 100, 100

1st Shot.

100	R 154,	let out 100 = 100
400	#1.	" " 100 = 200
300	R 159 + water bot,	" " 300 = 500

2nd Shot.

200	#1,	let out 100 = 100
100	# R 154	" " 60 = 160
40	R 159 + water bot	40 = 200

Pending - next page.

Cash #44

10439

Surface	62.5° F.	W.S.
40 m.	7.42 @ 11°	W.S.
100 m.	7.71 @ 12°	W.S.
200 m.	7.8 @ 12°	—
300 m.	7.7 @ 11°	W.S.
400 m.	5.4 @ 13°	W.S.
500 m.	5.04 @ 12°	W.S.

Sta 10234 July 29th
6 Am.

55 fath - 100 meters.

95 Pot. #154 lat. 50
40 " " #1 " " 40

Color #4.

0		58.5	W.S.
40	#1	3.2 @ 15	W.S.
95	#154	2.92 @ 95	W.S.

$$\frac{182}{100}$$

10235 Lucy 29

11 Ash

120 feet - 219 meters

1st shot

210 feet on R154 let out 110

100 " " #1 " " 100 = 210

2nd shot

feet on R154 let out 40

0 5.75 (1-1)

40 5.65 (a) 11.

100 5.3 (b) 10

210 5.3 (c) 10.5

240 Repeat

210 - 5.05 (d) 10

Th. no. 41

10226 Aug 2nd.

55 fathoms = 96 meters.

Paula	75'	lit out	45'	45'
T. 1.		" "	40'	85'

Lat 17° 4'

Long 63° 52'

0 m	2	55"
40 m	75	3 1/2 @ 7
85 m	75	.09 @ 7.5-

Net

20

Bel.

Quant 75 - 0

Wln 5 - 6

21/2

10237 Aug. 6

P.M.

46 fath. = 84 meters.

Ret. m.	N. v. G.	98	Lat. out	25	= 25
" "	" "	R. 154	" "	20	= 45
" "	R. 154	154	" "	30	= 75
		T. 1.			

Lat. 44 - 25
Long. 63 - 19

0	58°	W.S.
30	3.6	ca 11.
50	2.35	ca 11.
75	1.28	ca 11.

net

20
Grant - 25-0
Ref -

160

17⁹

Sta 10238 ~~July~~ Aug 6th
 95 fath. 173 meters

165 fath. N. 7. 95 - let out 45 = 45
 120 " " N. 7. 95 " " 40 = 85
 80 " " R 104 " " 40 = 125

40 " " ~~104~~, let out 40 = 165 - 5

Lat $44^{\circ} - 11'$

Long. $63^{\circ} 7'$

0	6.0	@	13.5
40	7.02	@	12.5
80	3.55	@	12.5
120	1.0	@	12.5
165	7.05	@	11.

187
776

St 10239 Aug 7 12:15 AM

Depth 140 fath = 256 m.

250	Pack on	N+Y	#95	61 out 50 = 50
200	" "	N+Y	#98	" " 50 = 100
150	" "	R	#154	" " 50 = 150
100	" "	#1		" " 60 = 210
40	" "	Pickman	R 160, R 158	" 40 = 250

0		59	WS
40	R 160 + 158	4.15	5.70 @ 14
100	#1	6	@ 14.5
150	R 154	8.40	@ 14.5
200	N+Y 98	9.10	@ 14.5
250	N+Y 95	8.58	@ 14

10240 Aug 7th 7 Am.

Depth : 91 m.

Part on.	Eckman.	Lat and	Long
" "	W. 4. 95	" "	40 2 40
" "	R. 15 d	" "	40 2 60
" "	#1	" "	40 2 80

0	59°		
20	11.9	(6)	14.
40	5.75	(6)	13.
60	5.93	(6)	12.5
80	5.70	(6)	12.
	5.90	(6)	12.

10242 Aug 7th

8th pattern = 146 m.

100	/	Put on Bottom	let out 40 = 40
100		7.4.98	" " 60 = 100
40		R 154	" " 40 = 140

Lat
Long

Surf drift - 1.2 m/hr

0	—	6.05	—	57°	
40		4.60	⊙	11	9'
100		6.20	⊙	8	5.45 2.00
140		7.05	⊙	10	—
		7.25	⊙	10	—

Surf drift S & a bottom
for 10.10

Aug 7th 11 Am. Blake
 impaled a sword-fish through
 the heart. He made a run
 of a few yards, sunked, stuck
 his head out of the water, then
 sounded so hard that he stuck
 his sword to the hilt in the mud
 bottom, & had to be pulled out

Measurements

Length, tip of snout to fork of caudal 3.25
 = feet 10 ft 8 in. meters

Front of eye to caudal base 187 cm.

Base C to fork C. 24 cm.

Tip snout to front eye 114 cm

Diam. eye Horiz. 9 cm.

" " Vert. 10.5 "

Length feet. 47 cm.

" dorsal 55 cm.

" Anal 38 cm over

Tip to tip caudal 100 cm.

Width of beak. 37 cm.

finlets, V, 9 cm D 9 cm.

D 21 A 12.

Depth 46 cm.

♀ ovaries little developed.

(preserved)

Stomach. Squids & fish much
digested, preserved.

Parasites from stomach living preserved.

Wair eating, but dry & tough.

July 7th 4 P.M. near Sta 10242.

Mr Blake harpooned a sunfish
from deep, after several vain
efforts. He sounded, but came
up like a log.

Measurements.

Total length. 117 cm.

Head, to front of dorsal 34 cm.

Snout to D 70

" to A 82

" " end carapace 93

" " base caudal 102

Greatest depth 73, at orig D to A 71

Thickness 25

Snout 17.5

Eye, horiz. 5.1 vert 3.5

width gap 6.5

Length D 45 A 42

Base D 25 A, 23

over

Color, slate marbled with white,
darker above, lighter below. D & A
slate with dark blotchy.

This beast can close his eye by
pulling it inwards, as if it had
a sphincter.

Body wall like very hard
tough cheese, 1 to 1½ inches thick,
pale white & covered with a thin
rough skin. except at base
of D & A & caudal, where
it is thin, the thin skin allowing
for movement. The caudal
can be moved.

Sex undeterminable

Stomach contents & gut ditto un-
determinable, a mass of clear
and pinkish slime.

Spine, gills, slices of body wall re-
tained possibly preserved.

30

Sta 10243 Aug 16th

Depth: 34' water - 63 meters

55 Pat. - 20 - 20
30 " " R 154 " " 30 - 55

0 56.5

30	R 154	—	7.6	(a) 13.2
55	CR	162	3.62	(a) 10
	ER	—	3.61	(a) 10

Sub.

Grout 55 - 0

20 - 0

Hel -

Sub 43 - 15

Long 65 - 27

10000

Aug. 12, 44

31. Jan. 56 miles

at Port ... ²⁰ ~~30~~ ... let out 20000
... #1 ... 30 ... 50

... 43 22.
... 64 26.

0 40

30 #1 7,7 @ 13

50 R 100
R 150 9.65 @ 12.

Hel met 40-0 m.

20 met Surf.

45-0 m

10246 Aug 12. 1020 Am

69 fath 12.6 min

120	Patm.	Big	let out	400 40
20	"	"	R154	40 2 800
40	"	"	#1	40 2 120

54

400	7.54	G	73
-----	------	---	----

40	8.15	E	12
----	------	---	----

120	18.00	G	12
-----	-------	---	----

Grant 110-2



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St. 10296 Aug 16 6 PM.
 110 feet - 201 meters

190 Put on. Sel. Lit out 40
 150 " " R 154 " 50 70
 100 " ~~11.4~~ 60 100
 40 " ~~3.4 172~~ " 100 100

Lat 44° 15' }
 Long 07° 23' }
 0.52

40 ~~11.4 172~~ 0.4 @ 10.5
 100 ~~11.4~~ 1.34 @ 11.
 150 R 154 7.12 @ 10.5
 190 R. 150 8.20
 190 R. 150 8.20 5 @ 10.

Grant 190 - 0.

Rel - 150 - 0

11.4



10247.

Aug 12 9.30 P.M.

37 $\text{gall.} = 67 \text{ m. l.}$

En R 154 7 35

30 1 30.60

Lab. } 94-21
Fing. } 67-28

0 1 50. f.

30 8.95 ①, 10.

60 F. 90 @ 100

41
12
54

Grant, 60-0

20. $\frac{1}{2}$ inch on surface



10248 Aug 13th

110 York 201 am

170	Pickup	R 154	40
150	"	R 154	50 = 90
100	"	#1	60 = 150
40	"	SV 294	40 = 190

0	576	WS.
40	SV 294	2.55 @ 11.2
100	#1	7.22 @ 11.
150	R 154	6.12 @ 10.5
190	R 110	8.38 10.5

Notes:

Q. 190 - 0.

Notes with

Notes

Notes

$$\begin{array}{r}
 183 \\
 36 \\
 9 \\
 \hline
 228
 \end{array}$$

(1) Leaf - *Phallosus - Noun*
Polina - noun

16249 Aug 13 S. R. R.

125 fath

220	R ¹⁶⁰ / ₁₅₄ Eckman	let out 70 = 70
150	R 154	" " 50 = 120
100	#1	" " 60 = 180
40	S+H 298	" " 40 = 220

0	63.5	WTS.
40	SV 298	6.48 @ 11.
100	#1	5.39 @ 12.
150	R 154	6.17 @ 12
220	R ¹⁶⁰ / ₁₅₄	} 5.90 @ 10

Hel - 175 - 0

Hel - 57 - 0

$$\frac{111}{111}$$

10750

Aug 14

8 Am.

8.5 fath. = 155 meters.

145-	2ch.	Ret. out.	45- 45
100	R14	" "	60 = 105
40	#1	" "	40 = 145

0	55.5.		WS
40	8.72 @ 16		WS
100	7.26 @ 14		WS
145-	6.24 @ 14.5		WS

Hel out 120-0

Quart 145-0

50- 20 m. surface,

100 - 1 Aug 14 2 PM

25 feet 1000

100	100	45 - 45
100	100	60 - 100
40	100	40 - 145

0	61.8	100
40	5.90 @ 19.	65
100	4.45 @ 19	105
145	5.14 @ 17	105

Lat . 43-27
Long . 69-29-

$$\frac{5 \frac{1}{2}}{1 \frac{1}{2}}$$

10552 Aug. 15th 6 Am.

77 fatts. - 140 minutes.

130	Put on	R 154	lit at 40-40
90	" "	" 1	" " 50-90
40	" "	R 154	" " 40-130

Lat. 42-57
Long. 70-15

0	61.2		
40	R 154	8 @	16.5
90	" 1	4.8 @	10.5
130	R 154	3.82 @	11.0

10 Sm

10252 Aug. 22, 1914

26 feet = 15% water

140	#1	Lat 40 - 40	40
100	R 124	" " 60 = 100	
40	Lab	" " 40 = 140	

0	66	{ 6.7 @ 16.5
40	3.56 @ 12	
100	2.73 @ 13	
140	4.61 @ 13.5	

quant. 180-0
Kel.

Lat 42-29-30
Long 70-18.

10000 Aug 22

Vol 4259

11 7/8ths 264 m

260 Put on #1 61-100-50
200 " R 154 " " 50-110
150 " Coleman " " 150-260

100 Put on #2 R 154 61-100-50
40 " " R 154 " 40-100

0 68°

40 5.85 @ 13

100 4.17 @ 12.5-100

150 5.64 @ 12.5

200 6.95 @ 15.5

260 7.20 @ 14.5

quant 250-0

Net = 225° 0

Billie 75-0°

100 - Long 7.5 to 10.0

100 - 100 = 100 m.

175	Lat. # 1	Lat. 2.5
110	" " R. 154	" 150 = 75
100	" " S+V.	60 105
100	" " Lat.	" 40 115

0	66.5	125.
40	R 160	7.98 @ 18.5 "
	R 118	" "
100	S+V. 298	4.25 @ 22.5 "
150	R 154	5.52 @ 21 "
175	#1.	6.64 @ 21.5 "

Lat 42-27.
Long 68-30



1025-6 Aug. 23, 10 PM.

100 ft. 14 in.

100	1	let out	30.5	30
100	R154		0.8	8.0
100	1.4		1.1	11.0
40	1.1		1.1	11.0

Lat. 41-55

Long. 69-25

50	67.2	
40	6.70 @ 14	
100	4.36 @ 12	
150	5.58 @ 14	
120	5.8 @ 14	

Grand total

Rel. 130 - 0.

20 ft #5 on surface

10707 2014

11/11/14

10 - 1st - 1st #1

0.1

10 10, 10 10
2014, #1 6.70 @ 13.5

Lat 41-39

Long 69-19

10.2

10.2

$$\begin{array}{r} 18,2 \\ 16,4 \\ \hline 346 \end{array}$$

175. Aug 50th 12:30 PM

19th 54 am.

~~30~~ Put on #1. let out 10 = 10

Put on " 160 " 20 = 30

0 67.5- WS.

15 14.32 @ 16

30. 12.15 @ 16.5

Color - 6-

Hel. ~~25-0~~
25-0

20 & 5 on imp

Lab. 41 - 03
Long. 70 - 51

$$\begin{array}{r} 54 \\ 7. \\ \hline 61 \end{array}$$

10259 Aug 25 6.15 PM.

33 fath = 61 m.

55- Pul on 160 61 out 30

25- " " #1 " " 25 = 50

0 71.5

25- 14.8 @ 18 # 1.

55- 9.80 @ 16.5 2.100

Lat 40-34

Long 70-46

Color 3.

200 ft. in air.

Rel - 50 - 0

Physalia & Pterodroma
(Puffin)

10260 Aug 26 6 AM

81 fath : 148 m.

Put on 160 Let out 40 = 40

" " #1 " " 60 = 160

" " Pole " " 40 = 140

Set for tile. Barren ground
Took 1 ♂ 19 lbs. spent on larvae } Stomach
1 ♀ 6 " immature. } empty.

0 73.2

40 13.75 @ 18.5-

100 11.75 @ 18.5-

140 11.55 @ 17.5-

Color about 2.

4-5 AM. Tide rises.

2 K. passed

142. 8 120
M. Lich. 60.

3.651
→

365

73

91

1147

10261

11-30 Aug. 20

245 fathoms and bottom

100	Paid on #160	Let out 150 = 150
100	" #1	" " 100 = 200
100	" Sail 248	" " 100 = 350
100	" Let	" " 100 = 450

0 79.3

100 13.18 @ 14.5-

200 12.04 @ 18.5-

300 10.10 @ 19.5-

450 7.46 @ 18.5-

Color about 2.

152
9.
172

18262, Aug. 26, 1911

128 fath. = 192 meters.

180	Put on R 160	Let out	80
100	" " #1	" "	60 = 140
40	" " SV 290	" "	40 = 180

111,

0	:	71.4.
40	:	13.12 @ 17.
100	:	11.40 @ 17.
180	:	...

Sigbee messenger S+V 298

Big #1 Richum #159

Big #3 Taylor #1

Big #2 15 V.

Square frame S+V 409

1. 1. 1.

2. 2. 2.

3. 3. 3.

4. 4. 4.

5.



19 $\frac{1}{2}$ first, as follows

12 ♀ spent

12 ♀ nearly ripe

12 ♀ " "

14 ♀ " "

12 ♀ " "

12 ♀ " "

13 ♀ well advanced

13 ♂ hard on spent

15 ♀ nearly ripe

16 ♀ " "

14 ♀ " "

14 $\frac{1}{2}$ ♀ well advanced

17 ♀ " "

About a month ago a big
wind drove the water off
the flats, and numbers of
large carp were stranded.
The town above named men
(\$13.10 half the pounds) picked
them up living, banded them
and shipped them to market.

Have not been able to find
anyone who has seen any
dead bass - in fact they
all say none have been caught
for two years.

hungry place
 1/2 (1/2) 1/2

13 ♀ nearly ripe

16 ♀ well advanced

15 ♀ nearly ripe

16 ♀ " "

2.35 ♀ Spent

2.35 ♀ Spent.

3.1

eel-grass, with shallow
open places, many of them
matted up by eelgrass. Towards
the shore, in the clear water,
were many sunfish, on and
about their nests, which were
numerous. Here the water
& vegetation looked all right,
and the fish were healthy.

Captain of the launch says
that, ~~in the fall~~ "about 2 weeks
ago had a run of very
low tide, and that it was
right after that that numbers
of dead eelgrass were seen."
Did not see any dead
eels. No bass (fractiously)
caught in two years.

10263 Aug 27th 9 AM.

Depth. 18 fath.

64.2°

17 fath. 13.35 @ 15.5

R 160

Lat 41-12

Long 70-57.

saw a large fish flip, but
could not make out what kind.
Samfish (gillbrows) abundant
here, & in good condition,
but no young fry of any
kind were seen, although special
efforts were made to find them.

Found here 100m. 75, with
a good deal of silt coming
down the stream.

No dead or sick fish found,
but fishes scarce and no
fry seen.

Then went over the flats
to other side, & worked
around there, mostly

10264 - Aug 28
2 Am

53 kth = 96 m
skooling 1 45.

110 - 111 let out 50 = 50
40 = 90

0 62°

30 7.4 @ 12 1/2

80 5.72 @ 12 1/2 R160

Cake files the ground is bare,
and at times of great flow
the water has burnt and killed
the sod around the edges.

The cake files themselves
are irregular and hard to
estimate, being mixed with
cinders and other debris. They
stand in a ragged row about
100 yds long. Two sprinklers
are kept playing on them to
aid in the dissolution.

8 Am. Took sample of
water direct from the flow from
the salt-files

8.30 Am. Took sample
from channel $\frac{1}{2}$ mile above
drainage area.

1044-1045

June 23rd 7 AM High water
got rowboat, & took sample
15 ft from mouth of sewer-pipe
Temp. 94° Water yellow &
smelling of acid

No life observed in water, either
plant or animal, from 50 feet
below to 100 feet above, where
splatterdocks & sedge appear
along the edge till the outflow
from the salt-cake is reached.

The salt cake stands about
30 yds back from a very
shallow cove, bordered by
splatterdocks, but showing
no signs of fish life. Where
the water from the cake flows
in, is a bar delta some 10 yds
wide. Between this and the

this outlet. The mud is whitish, and the water yellowish^{+clear}. No life was seen about this outlet.

At E are the salt-cake piles, between the acid mill and the creek. They look like nothing so much as dirty melting snow. The C.O. admits that a certain amount of acid is retained in the salt-cake, which is piled in the open and slowly disintegrates, draining in small rivulets over the 20 yards or so which separate it from the creek. That these rivulets are strongly acid is shown by the bare, burnt ground, bordered by burnt sod, through which they flow.

At wharf B., shallow water & eel grass, made a seine haul. Everything quite normal for the region. Sunfish, darters, notropis fundulus etc, all looking well. Vegetation normal.

At C took water sample, channel, first of young flood 2:40 P.M.
Temp. 78° F.

At D there is a concrete sewer pipe, coming from acid mill. Took sample here. There was very little flow, but the condition of the outlet showed that at times the flow is larger. All vegetation (except a few sflatwoods), was absent for about 10 yards from

June 22 . 1.30 P.M. low tide -
Left Indian Head.

Showery. Surf. temp of river 78°F .
Launch rather too large for the
job, draws 4 ft.

C.O. says that the same waste
has been disposed of in the same
way ever since 1898, without
complaint being made.

At Pound A. the owner said
he had had a poor season,
but that there never had been
anything the matter with the water
down here. Above, he said that
many carp had died

3 miles